Specifying the Master-Bilt Walk-In.

Alabama Department of Rehabilitation
Size: 7'-9" X 11'-7" X 8'-6"

GENERAL SPECIFICATIONS

A. General.
Walk-In cooler provided under this portion of the specifications shall be prefabricated, of modular design and construction. They shall be designed to allow convenient and accurate field assembly and future enlargement by the addition of panels.

B. Cooler: Interior Size: 7'-1" x 10'-11" x 7'-10" high.

C. PANEL FABRICATION.
Standard wall, ceiling, and floor panels shall be nominal 2' and 4' width and shall be interchangeable with like panels. Standard heights of walk-ins shall be 8'6".

Corner panels shall be 90 degree angles with actual 12" exterior horizontal measurements. Nominal 1'and 3' panels shall be used if required to meet jobsite conditions.

Panels shall consist of foamed-in-place urethane insulation, sandwiched between interior and exterior metal "skin" which has been die-formed and gauged for uniformity in size. Edges of panels shall be foamed-in-place tongue and groove with locking facilities foamed-in-place at time of fabrication.

D. FLOOR CONSTRUCTION.
Floor panels shall be foamed in place .188" textured aluminum fabricated similar to other panels, designed to readily withstand uniformly distributed loads of 600 lbs. per square foot. All edges and corners to be coved in accordance with NSF standard 7 and completely foamed in place. All joints shall be sealed with PVC bubble gasketing to be foamed in place not glued or stapled.

E. INSULATION - U.L. and F.M.
Each panel shall be completely filled with rigid foamed-in-place urethane having a thermal conductivity (K factor) of .118 BTU/hr.sq. ft. per degrees Fahrenheit/inch; and an overall coefficient of heat transfer (U factor) of not more than .029. R factor shall be 34. Insulation shall have a 97% closed call structure with an average in-place density of 2.4 lbs. per cubic foot, and a compression strength at yield point of 30 lbs. per square inch. Overall all thickness shall be 4". Fire hazard classification according to ASTME-84 (UL723) shall be a flame spread rating of 25* or less with a certifying Underwriters Label. Factory Mutual Approved. Toxicity Rated.

F. METAL FINISHES.
Panel skins, standard models, standard and optional metal finishes are as follows: NOTE: STUCCO GALVANIZED PANELS ARE NOT ACCEPTABLE.

1. Exterior floors and ceilings shall be .26 gauge Stucco Embossed Galvalume.

2. Exterior walls shall be:
a. Exterior walls: 26 gauge Stucco Embossed Galvalume.

3. Interior walls and ceiling shall be:
a. 26 gauge Stucco Embossed Galvalume.

4. Interior floor shall be:
a. .188" Textured aluminum.

G. PANEL LOCKING ASSEMBLIES.
Assembly of walk-in shall be accomplished by cam-action locking devices. Locks shall be foamed-in-place and activated by a hex wrench by the manufacturer. Access ports to locking devices shall be covered by snap caps. Access ports shall be on interior to allow assemble of walk-in from the inside.

H. SECTION GASKETS.
N.S.F. listed gaskets shall be foamed-in-place to the male side of all panels, on both interior and exterior. Gaskets shall be impervious to stains, greases, oils, mildew, etc.

I. ENTRANCE DOOR AND DOOR PANEL.
Each walk-in shall be fitted with one standard 36"x78" swing type entrance door. The door shall be flush type, finished in and out to match the walls in which located. Doors and door handles shall be listed by Underwriters Laboratories and equipped with the following:

1. Door shall be flush-mounted, infitting type with door panel construction the same as for other panels. Insulation shall be same thickness and type as used in other panels.

2. Infitting door frame construction shall consist of a vinyl frame with heavy-gauge steel backup. In addition, infitting door shall consist of 1/4" thick steel hinge backing plate welded to the hinge side of the heavy-gauge steel frame at the hinge location. The hinge shall be field adjustable.

3. Infitting door shall be provided with adjustable hinge backup plates for each hinge. Backup plates shall be foamed-in-place behind he door leaf casing metal and shall consist of a minimum 14 gauge enclosure. Adjustable hinge backing plates shall be precision-drilled and tapped to accept hinge blade mounting screws and shall be designed to provide in-field adjustment of door hinges without removal of the hinges from the door frame.

4. On all walk-ins, infitting door jamb shall be provided with thermoplastic, magnetic steel core gasket across top and along both sides of the door. Bottom of the door shall be fitted with adjustable, double vinyl wiper gasket. Gasket shall be water, oil, sunlight and fat resistant. When the door is in the closed position, the magnetic gasket shall form a positive airtight seal. Door gasket shall be easily replaceable.

5. Doors shall be equipped with two (2) heavy-duty hinges. Hinges shall have cam-lift nylon bearings mounted on heavy stainless steel pins. Door hinges shall have positive "hold-open" feature allowing door to remain open unaided, when opened to 180 degrees position. Hinges shall have a brushed finish. Doors will have an Deadbolt Locking Handle with bright polished chrome finishes and a deadbolt that can be independently locked with either key or padlock. A locking mechanism with inside release knob is mounted on the frame side of the door opening and includes no moving parts through frame. Mechanism has no exposed fasteners to give maximum tamper resistance. Locked door cannot be opened even if handle is removed from door.

6. 36" x 78" doors shall be provided with a door closure.

7. Each entrance door section shall be provided with an incandescent type vapor proof light, pilot light switch and rigid conduit between switch box and outlet box. Concealed wiring shall be standard on each entrance door section.

8. A stainless steel threshold with non-skid stripping shall be provided with each door section with floors. Heater wire shall continue beneath the threshold on freezer models.

9. Each door will have a 36" high 1/8" diamond aluminum treadplate kickplate on the interior and exterior.

10. A 3" diameter dial thermometer with 2-1/2" face shall be provided mounted on the door panel exterior. Thermometer shall be complete with minimum 50" capillary tube with sensor and minimum temperature range from -40 degrees to 60 degrees F.

J. INTERIOR FLOOR RAMP:
Each entrance door section will have a foamed in place 20" x 36" interior floor ramp with matching finish.

K. N.S.F.
All walk-ins shall be fabricated Sanitation Foundation No. 7. The N.S.F. label shall be affixed to the interior door pan. All interior corners, including floor and ceiling, shall be coved.

L. EXTERIOR MEMBRANE ROOF CAP:
The walk-in will include an exterior membrane roof cap package with edge trim and flashing for one (1) 11'7" side.

M. INSTALLATION INSTRUCTIONS.
A complete set of installation instructions shall be included with the walk-in. A floor plan print shall be included.

N. TRIM AND ENCLOSURE PANELS.
Provide Matching Aluminum Trim where the walk-in box adjoins the kitchen walls and ceiling. Field verify size where required.

O. REFRIGERATION EQUIPMENT (EQUAL TO):
1. Master-Bilt Model: PR-Pre-Assembled Remote.
Cooler: One (1) Model MHHZ0111C: 208V-3-phase
One (1) Model E1HZ0090A – EVAPORATOR COIL

2. Condensing units shall be hermetic type. Refrigerant shall be R-404A for the cooler. Condenser shall be air-cooled. Condensing units shall be factory assembled and U.L. listed. Evaporators shall be forced air type. Air discharge shall be parallel to the walk-in ceiling. Fan motors, guards, multi-fin and tube-type coil, shall be housed in heavy gauge aluminum housing. Unit shall have drain pan with suitable drain pipe connection. Defrost shall be time initiated and temperature terminated with built-in fail-safe control. All evaporators shall be U.L. listed.

3. These basic components shall be supplied by MASTER-BILT on the following system:

a. Parts include condensing unit, evaporator, control, expansion valve, dryer, sight glass, vibration eliminator, and evaporator mounting kit.

b. Pre-assembled remote- same components as outlined above, with all parts mounted by Master-Bilt. Only electrical hook-up to be supplied by the electrical contractors.

4. All refrigeration systems shall be factory assembled and tested in accordance with best commercial procedures. Good commercial start-up and check-out procedures shall be used by a qualified refrigeration contractor. All components shall have a one (1) year factory warranty. Capacities, CFM, and voltage requirements shall be shown in a separate schedule.

P. REFRIGERATION ACCESSORIES.
These items shall be used with systems listed above, where required by job conditions.

1. Pump-down cycle kit - includes temperature control and liquid line solenoid valve.

2. Extreme low ambient kit - includes low pressure control, temperature control, solenoid valve for pumpdown, crankcase heater, head master control and rainproof housing.

Q. DRAIN LINES.
Installing contractor shall provide suitable drain lines from all evaporators. Drains shall be trapped outside the walk-in. Freezer drains shall be heated and insulated to prevent freeze-up. All plumbing to be in accordance with local codes.

R. WARRANTY:
1. One Year: Provide one (1) year warranty on all components inclusive of parts, labor, travel, time.

a. Walk-In Manufacturer to Provide One (1) year parts warranty for all refrigeration systems.

b. Successful Bidder to Provide One (1) year labor portion of the warranty on the refrigeration systems.

2. Five Year: Provide five (5) year warranty (four additional years) on compressor including parts, labor, travel and time "non-prorated."

3. Ten Year: Provide ten (10) year limited warranty on panels.

ALABAMA DEPARTMENT OF REHABILITATION
WALK-IN COOLER SHELVING
ADVANCE TABCO GREEN EPOXY SHELVES.

Shelving shall be of the type supplied by Advance Tabco Foodservice and known as Advance Green Epoxy Shelving. The shelving shall be finished with Chrome plating and corrosion resistant baked polyester/**GREEN** epoxy polymer top coat. A shelving unit shall be able to be assembled without tools. When the plastic **Tapered Split Sleeves** corner insert is secured to the round post and the shelf is lowered into place. The two piece molded plastic **Tapered Split Sleeve** shall be of a two piece design with 2 internal ridges that fit securely into 2 of the post grooves.

Shelving shall incorporate multiple trusses running lengthwise in addition to a truss on each end of the shelf. This design shall provide for a rigid framework to minimize deflection under load and to allow for uniform weight loading of up to 1250 lbs. per shelf. Each shelf shall be a **minimum** of **three (3)** trusses running the length of the shelf. The trusses shall be of a serpentine design. The shelf deck shall have a raised edge on all 4 sides a minimum of .200" high. Running the length of the shelf shall be 2 die formed marine edges. Each shelf shall have ribs of 9 ga. wire on 1" centers running front to back. Perpendicular to these 9ga. ribs there are additional support rods of 4 ga. wire running the length of the shelf.

POSTS:
Posts shall be of 1" round tubing with .065" thick walls made of plating quality steel with a corrosion resistant baked polyester/**GREEN** epoxy polymer top coat. Posts will have grooves spaced 1" apart with embossed numbers. Each posts shall have a plastic top cap and adjustable metal foot.

DUNNAGE RACKS:
Dunnage Racks shall be All Aluminum Welded Tube Design.

PROVIDE THE FOLLOWING SIZES:

COOLER:
1 DUN-2448 24X48 DUNNAGE RACK
8 EG-2136 21X36 GREEN EPOXY SHELVES
4 EG-2442 24X42 GREEN EPOXY SHELVES
12 EG-2436 24X36 GREEN EPOXY SHELVES
24 EGP-74 74" GREEN EPOXY POSTS